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<b>(21) International Application Number:</b> PCT/AU99/01052 <b>(22) International Filing Date:</b> 25 November 1999 (25.11.99) <b>(30) Priority Data:</b> PP 7288 25 November 1998 (25.11.98) AU <b>(71) Applicant (for all designated States except US):</b> THE UNIVERSITY OF QUEENSLAND [AU/AU]; St. Lucia, Brisbane, QLD 4072 (AU). <b>(72) Inventors; and</b> <b>(73) Inventors/Applicants (for US only):</b> STACEY, Katryn, Jane [AU/AU]; 24 Highview Terrace, St. Lucia, QLD 4067 (AU). SESTER, David, Peter [AU/AU]; 29 Hawken Drive, St. Lucia, QLD 4067 (AU). SWEET, Matthew, James [AU/GB]; G1 21 Kirkland Street, North Kelvinside, Glasgow, Strathclyde G20 6SY (GB). HUME, David, Arthur [AU/AU]; 27 Aloomba Road, Ashgrove, QLD 4060 (AU). <b>(74) Agent:</b> FISHER ADAMS KELLY; Level 13, AMP Place, 10 Eagle Street, Brisbane, QLD 4000 (AU).	<b>(81) Designated States:</b> AE, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CR, CU, CZ, DE, DK, DM, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW, ARIPO patent (GH, GM, KE, LS, MW, SD, SL, SZ, TZ, UG, ZW), Eurasian patent (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European patent (AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE), OAPI patent (BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG).  <b>Published</b> <i>With international search report.</i>	
<b>(54) Title:</b> IMMUNOSTIMULATORY DNA  <b>(57) Abstract</b>  Methods of identifying immunostimulatory DNA are provided, which methods include (i) detection of immunostimulatory DNA by formation of a complex between the DNA and isolated Replication Protein A (RPA) subunits; and (ii) down-regulation of CSF-1R expression by macrophages or macrophage cell cycle arrest. Also provided are immunostimulatory DNA agonists and antagonists.		